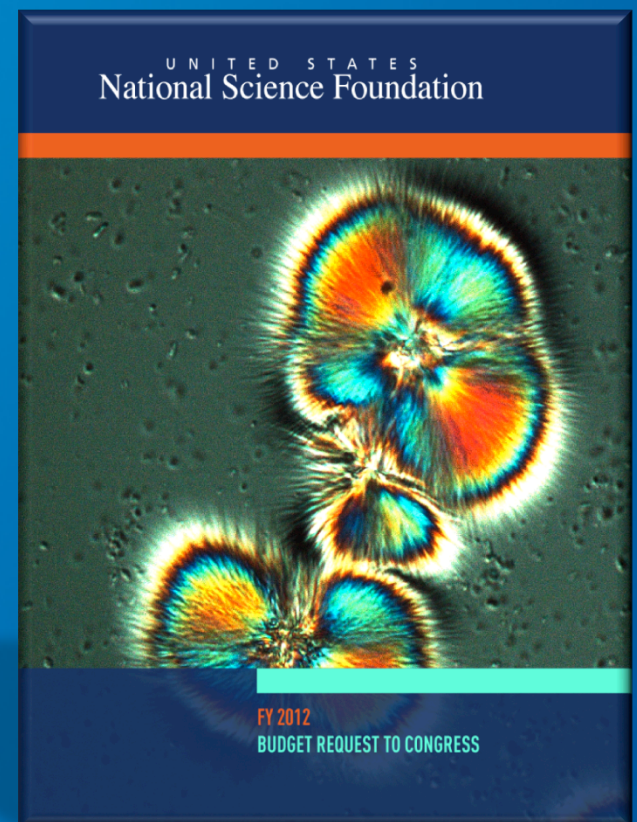




GEO FY 2012 Budget Request

Tim Killeen
Assistant Director for Geosciences
February 14, 2011



Administration Priorities



*“We need to out-innovate,
out-educate, and out-
build the rest of the
world.”*

President Barack Obama
State of the Union Address
January 25, 2011



FY 2012 Request

- In 2012, GEO is requesting \$979,160,000; an increase of \$89.52 million or 10.1%.
- All increases are based on the existing FY 2011 Continuing Resolution, which for GEO is the same as the 2010 Appropriation.



Budget Request by Division

GEO Funding (Dollars in Millions)

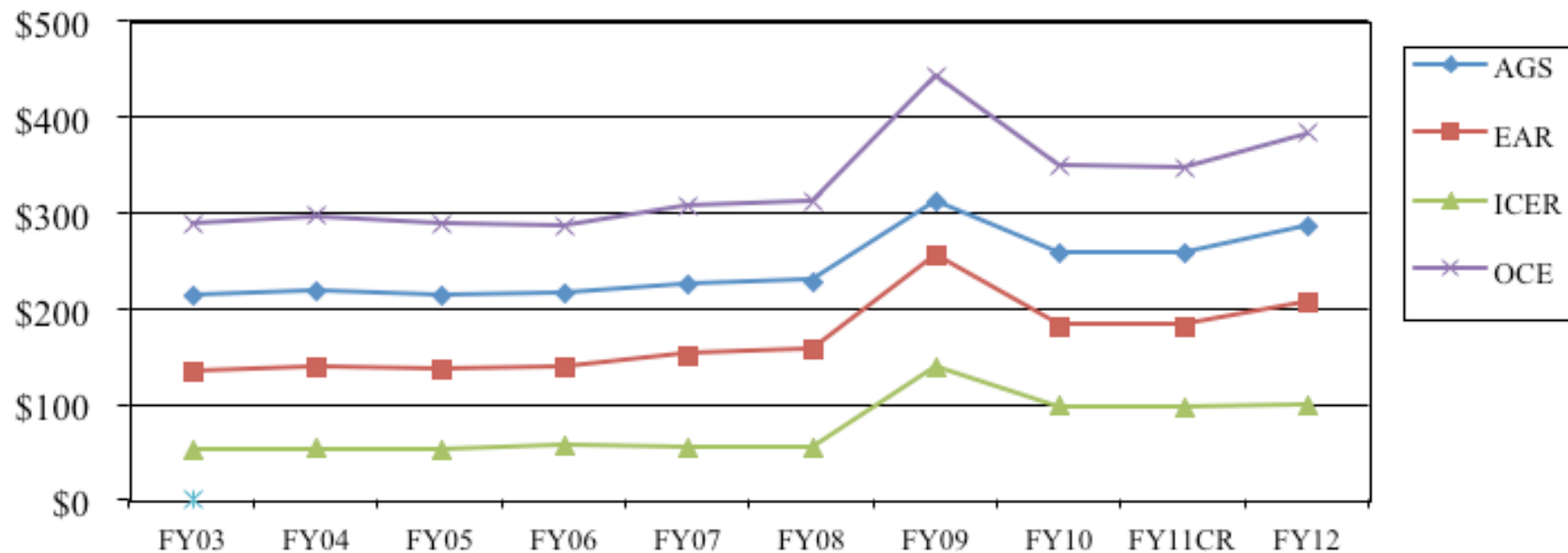
	FY 2010 Omnibus Actual	FY 2010 Enacted/ Annualized FY 2011 CR	FY 2012 Request	Change Over FY 2010 Enacted	
				Amount	Percent
AGS	\$259.87	\$259.80	\$286.33	\$26.53	10.2%
EAR	183.26	183.00	207.27	24.27	13.3%
ICER	98.87	97.92	100.92	3.00	3.1%
OCE	349.88	348.92	384.64	35.72	10.2%
Total, GEO	\$891.87	\$889.64	\$979.16	\$89.52	10.1%

Totals may not add due to rounding.



GEO Ten-year Funding History

GEO Subactivity Funding
(Dollars in Millions)



Major Investments in 2012

- Science, Engineering and Education for Sustainability (SEES)
- Cyberinfrastructure Framework for 21st Century Science and Engineering (CIF21)
- Creating a More Disaster Resilient America (CaMRA)
- Continuing investments in Basic Research, Education & Diversity, Infrastructure



Science, Engineering, and Education for Sustainability (SEES)

- Goal: Generate discoveries and build capacity to achieve an environmentally and economically sustainable future
- FY 2012 priorities:
 - *Advance a clean energy future*
 - *Nurture the emerging SEES workforce*
 - *Expand research, education, and knowledge dissemination*
 - *Engage with global partners*
- Environment, energy, and economy nexus
- Increase of \$338 million over FY 2010 enacted level (GEO increase \$87.2M)



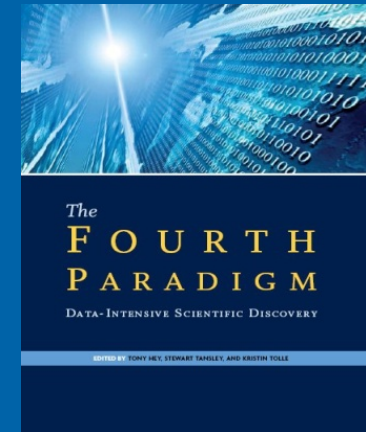
SEES – Geosciences Foci

- Sustainable Energy Pathways
 - characterize and understand existing energy systems and their limitations (e.g. wind, geothermal, hydro)
 - understand risks and stressors associated with new and emerging energy sources (e.g. tidal, clean coal, carbon sequestration)
- Sustainability Research Networks
 - interdisciplinary research and education partnerships involving government, academe, and the private sector
 - address fundamental issues of use in improving policy and practices with regard to energy, the environment, and human well-being



Cyberinfrastructure Framework for 21st Century Science and Engineering (CIF21)

- Comprehensive and integrated cyberinfrastructure to transform research, innovation and education
- Focus on computational and data-intensive science to address complex problems
- Four major components
 - Data-enabled science
 - New computational infrastructure
 - Community research networks
 - Access and connections to cyberinfrastructure facilities



CIF21 – Geosciences Foci

- GEO investment is \$16 million in 2012
- Computational Infrastructure
 - acquisition and use of cyberinfrastructure for the conduct of geoscience research
- Data Enabled Science
 - geoinformatics – the tools and techniques that facilitate data-enabled geoscience
 - enhancement of access and connections to facilities and scientific instruments



Creating a More Disaster Resilient America (CaMRA)

- GEO will initiate a new \$10.0 million GEO-wide program on Creating a More Disaster Resilient America (CaMRA)
- CAMRA will catalyze basic research efforts in hazard-related science to improve forecasting and prediction of natural and man-made hazardous events
- AGS, EAR, and OCE are participating
- A formal solicitation is anticipated



Continuing Investments in Education and Diversity

- GEO is continuing to develop the geoscience workforce of the future
 - OEDG
 - GEO Ed
 - GEO Teach
 - COSEE
 - CAREER
- GEO's direct investments exceed \$50 million in 2012



Infrastructure Update

- Ocean Observatories Initiative
 - Construction is underway
- R/V SIKULIAQ
 - Construction proceeding on schedule
- NCAR/Wyoming Supercomputing Center
 - 2012 is the final year of construction
- Regional Class Research Vessels
 - Construction of up to 3 ships is under consideration as an MREFC project



New GEO Facilities

- Ocean Observatories
 - under construction



- R/V SIKULIAQ
 - under construction



NCAR/Wyoming Supercomputing Center



Under construction this morning





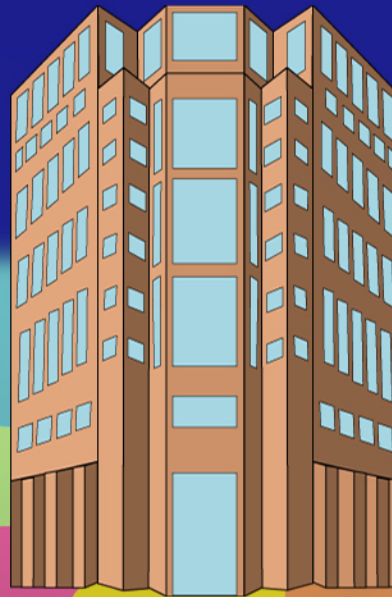
OneNSF



catalyze human capital development



improve
organizational
efficiency



create
networks and
infrastructure
for the nation



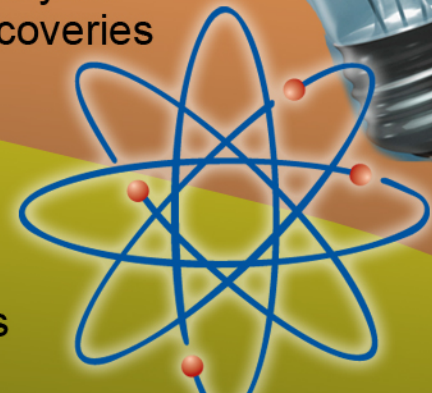
spark greater innovation
and opportunity for
scientific discoveries



address
multidisciplinary
challenges of
national/global significance

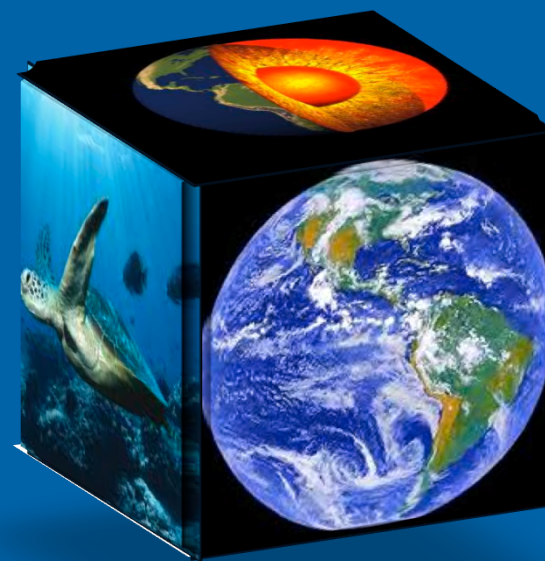


support
fundamental
research in
all disciplines



GEO in OneNSF

- GEO's FY2012 Budget Request provides exciting opportunities to:
 - Attack complex multidisciplinary challenges
 - Ignite innovation and opportunity for discovery
 - Catalyze breakthroughs across the sciences
 - Create new networks and cyberinfrastructure
 - Explore the planet in new and transformative ways



GEO is committed to sustainable practices



- All materials are available online – www.geo.nsf.gov



Where discoveries begin

